D H E C
PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

Division of Acute Disease Epidemiology *(DADE)*

CHESS Club *for providers*

September/October 2011

Inside this issue

Who Reports What in CHESS?

Do you have multiple CHESS users in your facility? If so, do you and the other user(s) talk about who is reporting what in CHESS? This may sound like a silly question, but it is not. In all emergency events, communication is found to be the single biggest challenge.

So often, we assume instead of clarifying. Since August, I have been collecting information from the hospital CHESS users so that non-reporting issues can be identified and corrected. This is continuing the remainder of 2011 and will be updated each year. We have found errors where something was not reported month after month because one person thought the other person or department was reporting. We have also discovered printers that did not download results to the person responsible for reporting in CHESS.

Remember to ask the other users and departments in your facility what is reported by whom. To help you get started, here is a short list:

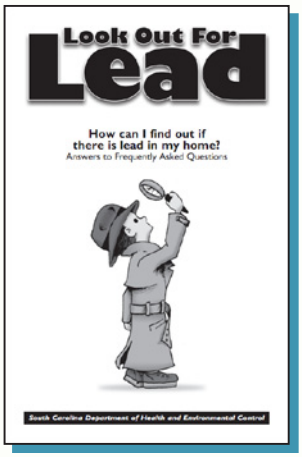
- STD/HIV (gonorrhea, Chlamydia, syphilis, HIV)
- Hepatitis (A, B, C, …)
- Pertussis
- MRSA in blood cultures
- Animal bites – PEP recommended

In your facility, how do you and other CHESS users decide who reports? Do you take inpatients and someone else takes outpatients? Do you report STD/HIV and someone else reports cultures like MRSA-BSI and CRE? Talk with each other to be sure both or all of you are clear on who reports what in CHESS.

Children are most commonly lead poisoned from exposure to lead-based paint, commonly found in homes built before 1978. Without proper precautions, disturbing the lead paint creates dust that settles on toys, window sills and floors. Children can easily swallow bits of dust and paint chips.

Lead poisoning can affect nearly every system in the body. Because lead poisoning occurs with no obvious symptoms, it frequently goes unrecognized. The Centers for Disease Control and Prevention childhood lead testing guidelines recommend that all children should:

1) receive a blood lead test at ages 12 months and 24 months; or
2) children aged 36-72 months should receive a blood test if they have not been previously screened.



SC DHEC offers printed materials that inform the general public about childhood lead poisoning elimination efforts in the state, as well as tips on how to prevent lead poisoning among young children. Childhood lead poisoning remains a major environmental health problem in the United States, and it is entirely preventable. Please do your part as public health professionals by spreading the message to your patient families and communities.

For more information on the elimination of childhood lead poisoning and/or resources please go to **My Health and Environment : Childhood Lead**
http://www.scdhec.gov/administration/epht/Lead.htm
http://www.scdhec.gov/lead

Do NOT Enter Lead in CHESS!

How do I report Lead?

This question comes up over and over, so let's take a minute to understand LEAD reporting to DHEC.

Lead is listed twice on the SC List of Reportable Conditions, and both listings are under Report Within 7 Days.

- Lead poisoning (elevated blood lead levels, all ages) (5)
- Lead tests, all (age <6) (L)

The (5) is explained at the bottom of the page of reportable conditions.

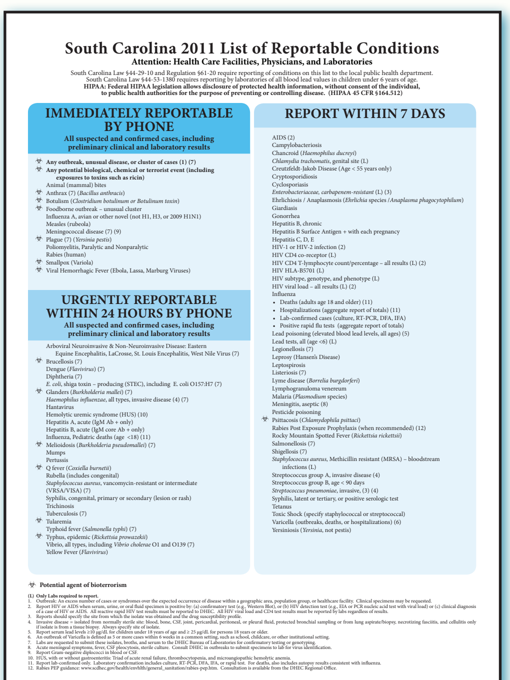
5. Report serum lead levels > or = 10ug/dL for children under 18 years of age and > or = 25ug/dL for persons 18 years or older.

The (L) is also explained at the bottom of the page.

(L) only Labs required to report.

All blood lead results of 10 mcg/dL or greater are followed up by DHEC.

Do not enter Lead in CHESS.



South Carolina 2011 List of Reportable Conditions

Attention: Health Care Facilities, Physicians, and Laboratories

South Carolina Law §44-29-10 and Regulation §61-20 require reporting of conditions on this list to the local public health department.
South Carolina Law §44-53-1380 requires reporting by laboratories of all blood lead values in children under 6 years of age.
HIPAA: Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512)

IMMEDIATELY REPORTABLE BY PHONE
All suspected and confirmed cases, including preliminary clinical and laboratory results

- ☣ **Any outbreak, unusual disease, or cluster of cases (1) (7)**
- ☣ **Any potential biological, chemical or terrorist event (including exposures to toxins such as ricin)**
- Animal (mammal) bites
- ☣ Anthrax (7) (*Bacillus anthracis*)
- ☣ Botulism (*Clostridium botulinum or Botulinum toxin*)
- ☣ Foodborne outbreak – unusual cluster
- Influenza A, avian or other novel (not H1, H3, or 2009 H1N1)
- Measles (rubeola)
- Meningococcal disease (7) (9)
- ☣ Plague (7) (*Yersinia pestis*)
- Poliomyelitis, Paralytic and Nonparalytic
- Rabies (human)
- ☣ Smallpox (Variola)
- ☣ Viral Hemorrhagic Fever (Ebola, Lassa, Marburg Viruses)

URGENTLY REPORTABLE WITHIN 24 HOURS BY PHONE
All suspected and confirmed cases, including preliminary clinical and laboratory results

- Arboviral Neuroinvasive & Non-Neuroinvasive Disease: Eastern Equine Encephalitis, LaCrosse, St. Louis Encephalitis, West Nile Virus (7)
- ☣ Brucellosis (7)
- Dengue (*Flavivirus*) (7)
- Diphtheria (7)
- *E. coli*, shiga toxin – producing (STEC), including E. coli O157:H7 (7)
- ☣ Glanders (*Burkholderia mallei*) (7)
- *Haemophilus influenzae*, all types, invasive disease (4) (7)
- Hantavirus
- Hemolytic uremic syndrome (HUS) (10)
- Hepatitis A, acute (IgM Ab + only)
- Hepatitis B, acute (IgM core Ab + only)
- Influenza, Pediatric deaths (age <18) (11)
- ☣ Melioidosis (*Burkholderia pseudomallei*) (7)
- Mumps
- Pertussis
- ☣ Q fever (*Coxiella burnetii*)
- Rubella (includes congenital)
- *Staphylococcus aureus*, vancomycin-resistant or intermediate (VRSA/VISA) (7)
- Syphilis, congenital, primary or secondary (lesion or rash)
- Trichinosis
- Tuberculosis (7)
- ☣ Tularemia
- Typhoid fever (*Salmonella typhi*) (7)
- ☣ Typhus, epidemic (*Rickettsia prowazekii*)
- Vibrio, all types, including *Vibrio cholerae* O1 and O139 (7)
- Yellow Fever (*Flavivirus*)

REPORT WITHIN 7 DAYS

- AIDS (2)
- Campylobacteriosis
- Chancroid (*Haemophilus ducreyi*)
- *Chlamydia trachomatis*, genital site (L)
- Creutzfeldt-Jakob Disease (Age < 55 years only)
- Cryptosporidiosis
- Cyclosporiasis
- *Enterobacteriaceae, carbapenem-resistant* (L) (3)
- Ehrlichiosis / Anaplasmosis (*Ehrlichia* species /*Anaplasma phagocytophilum*)
- Giardiasis
- Gonorrhea
- Hepatitis B, chronic
- Hepatitis B Surface Antigen + with each pregnancy
- Hepatitis C, D, E
- HIV-1 or HIV-2 infection (2)
- HIV CD4 co-receptor (L)
- HIV CD4 T-lymphocyte count/percentage – all results (L) (2)
- HIV HLA-B5701 (L)
- HIV subtype, genotype, and phenotype (L)
- HIV viral load – all results (L) (2)
- Influenza
  - Deaths (adults age 18 and older) (11)
  - Hospitalizations (aggregate report of totals) (11)
  - Lab-confirmed cases (culture, RT-PCR, DFA, IFA)
  - Positive rapid flu tests (aggregate report of totals)
- Lead poisoning (elevated blood lead levels, all ages) (5)
- Lead tests, all (age <6) (L)
- Legionellosis (7)
- Leprosy (Hansen's Disease)
- Leptospirosis
- Listeriosis (7)
- Lyme disease (*Borrelia burgdorferi*)
- Lymphogranuloma venereum
- Malaria (*Plasmodium* species)
- Meningitis, aseptic (8)
- Pesticide poisoning
- ☣ Psittacosis (*Chlamydophila psittaci*)
- Rabies Post Exposure Prophylaxis (when recommended) (12)
- Rocky Mountain Spotted Fever (*Rickettsia rickettsii*)
- Salmonellosis (7)
- Shigellosis (7)
- *Staphylococcus aureus*, Methicillin resistant (MRSA) – bloodstream infections (L)
- Streptococcus group A, invasive disease (4)
- Streptococcus group B, age < 90 days
- *Streptococcus pneumoniae*, invasive, (3) (4)
- Syphilis, latent or tertiary, or positive serologic test
- Tetanus
- Toxic Shock (specify staphylococcal or streptococcal)
- Varicella (outbreaks, deaths, or hospitalizations) (6)
- Yersiniosis (*Yersinia*, not pestis)

☣ **Potential agent of bioterrorism**

(L) **Only Labs required to report.**
1. Outbreak: An excess number of cases or syndromes over the expected occurrence of disease within a geographic area, population group, or healthcare facility. Clinical specimens may be requested.
2. Report HIV or AIDS when serum, urine, or oral fluid specimen is positive by: (a) confirmatory test (e.g., Western Blot), or (b) HIV detection test (e.g., EIA or PCR nucleic acid test with viral load) or (c) clinical diagnosis of a case of HIV or AIDS. All reactive rapid HIV test results must be reported to DHEC. All HIV viral load and CD4 test results must be reported by labs regardless of results.
3. Reports should specify the site from which the isolate was obtained and the drug susceptibility profile.
4. Invasive disease = isolated from normally sterile site: blood, bone, CSF, joint, pericardial, peritoneal, or pleural fluid, protected bronchial sampling or from lung aspirate/biopsy, necrotizing fasciitis, and cellulitis only if isolate is from a tissue biopsy. Always specify site of isolate.
5. Report serum lead levels ≥10 μg/dL for children under 18 years of age and ≥ 25 μg/dL for persons 18 years or older.
6. An outbreak of Varicella is defined as 5 or more cases within 6 weeks in a common setting, such as school, childcare, or other institutional setting.
7. Labs are requested to submit these isolates, broths, and serum to the DHEC Bureau of Laboratories for confirmatory testing or genotyping.
8. Acute meningeal symptoms, fever, CSF pleocytosis, sterile culture. Consult DHEC in outbreaks to submit specimens to lab for virus identification.
9. Report Gram-negative diplococci in blood or CSF.
10. HUS, with or without gastroenteritis: Triad of acute renal failure, thrombocytopenia, and microangiopathic hemolytic anemia.
11. Report lab-confirmed only. Laboratory confirmation includes culture, RT-PCR, DFA, IFA, or rapid test. For deaths, also includes autopsy results consistent with influenza.
12. Rabies PEP guidance: www.scdhec.gov/health/envhlth/general_sanitation/rabies-pep.htm. Consultation is available from the DHEC Regional Office.

Report Lead to:

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Special Projects Coordinator
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Reports should be legible to avoid keying errors and should contain the following:

- Patient's name;
- Patient's date of birth;
- Patient's address and phone number;
- Date of specimen collection and result (document capillary or venous);
- Name of physician; and
- Name of the reporting lab

The DHEC 1129 cards are appropriate for sending the information or hard copies of results with all patient demographic information (as indicated above) included.

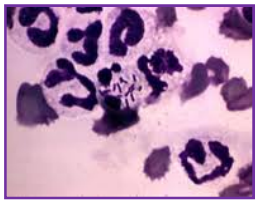
Listeriosis in the News

Recently, national concern developed as an outbreak of listeriosis was traced to cantaloupes. The contaminated cantaloupes, grown by Jensen Farms in Colorado, were labeled as Rocky Ford and shipped to many US states. A voluntary recall was issued by Jensen Farms on September 14, with over 50% of states in the US affected by illness and/or deaths caused by the bacterium Listeria monocytogenes. Cantaloupes that did NOT come from Jensen Farms are safe to eat but if in doubt as to the source of your cantaloupe, remember "when in doubt, throw it out."

As of October 18, no shipments to SC or cases of illness in SC have occurred.

What is Listeriosis?

Listeriosis is a serious infection caused by eating food contaminated with the bacterium Listeria monocytogenes. The disease primarily affects older adults, pregnant women, newborns, and adults with weakened immune systems. However, rarely persons without these risk factors can also be affected.



Listeria monocytogenes is commonly found in soil and water. Animals can also have the bacterium without appearing ill. With contaminated soil, water, and animals as the origin, Listeria can contaminate foods such as meats & dairy products as well as fruits and vegetables. Listeria bacteria can survive for years, even in refrigerated temperatures. This means that items not contaminated when they arrive at food processing factories can also become contaminated with Listeria during the packaging process. Items such as hot dogs and deli meats, which do not have to be cooked before eating out of the package, are other sources of listeriosis.

How can risk be reduced?

Foods are contaminated with the bacterium in the field, at food processing plants, and even in your home. The risk may be reduced by recommendations for safe food preparation, consumption, and storage. Here are recommendations for protecting your home and food from Listeria.

- Wash all fruits and vegetables under running water just before eating, cutting or cooking, even if you plan to peel the produce first. Scrub firm produce such as melons and cucumbers with a clean produce brush.
- Although Listeria can grow at refrigeration temperatures, it grows more slowly at refrigerator temperatures of 40° F or less.
- Wrap or cover foods with a sheet of plastic wrap or foil or put foods in plastic bags or clean covered containers before you place them in the refrigerator. Make certain foods do not leak juices onto other foods.
- Place an appliance thermometer, such as a refrigerator thermometer, in the refrigerator, and check the temperature periodically. Place a second thermometer in the freezer to check the temperature there. Use precooked and ready-to-eat foods as soon as you can. The longer they are stored in the refrigerator, the more chance Listeria has to grow. If you have leftovers in your refrigerator, it's best to throw them out after three days, just to be sure.
- Clean the inside walls and shelves of your refrigerator with warm water and liquid soap, then rinse.
- As an added measure of caution, you can sanitize your refrigerator and kitchen surfaces with a mixture of 1 teaspoon of unscented bleach to one 1 quart of water. Allow the solution to stay on surfaces for 10 minutes before wiping clean with warm water. Bleach solutions get less effective with time, so discard unused portions daily.

Listeriosis in the News. . .*continued*

What are the symptoms?

A person with listeriosis usually has fever and muscle aches, sometimes preceded by diarrhea or other gastrointestinal symptoms. Almost everyone who is diagnosed with listeriosis has "invasive" infection, in which the bacteria spread beyond the gastrointestinal tract. The symptoms vary with the infected person, but can include mild, flu-like symptoms to more serious concerns of stiff neck, confusion, loss of balance, or convulsions.

How is Listeriosis diagnosed?

Diagnosis is confirmed only after isolation of Listeria monocytogenes from a normally sterile site, such as blood, or from amniotic fluid or the placenta in the setting of pregnancy. Microbiologists need to suspect Listeria every time they detect a beta hemolytic organism from blood, CSF, or placental specimens. Simple tests such as Gram stain and catalase can be performed quickly to distinguish Listeria from Beta Hemolytic Streptococcus.

Although Listeria is contracted by eating contaminated food, stool culture is not sensitive, and is therefore not recommended by DHEC or the CDC. Serological tests are also unreliable, and not recommended at the present time.

Labs are also requested to submit an isolate or broth to the DHEC Bureau of Laboratories for confirmatory testing and Molecular analysis. The SC BOL is a participant in the National Molecular Subtyping Network for Foodborne Disease Surveillance (PulseNet). When a PulseNet laboratory identifies a group of matching molecular fingerprints from patient isolates or foods, state epidemiologists can conduct a food consumption analysis with the corresponding patients. This type of analysis is helpful in identifying statistically linked foods to be investigated in foodborne outbreaks. This study was helpful in identifying cantaloupe as the implicated vector in the recent outbreak.

How is Listeriosis treated?

- Listeriosis is treated with antibiotics. A person in a high-risk category who experiences flu-like symptoms within 2 months of eating contaminated food should seek medical care and tell the physician or health care provider about eating the contaminated food.
- If a person has eaten food contaminated with Listeria and does not have any symptoms, most experts believe that no tests or treatment are needed, even for persons at high risk for listeriosis.
- Even with prompt treatment, some listeriosis cases result in death. This is particularly likely in older adults and in persons with other serious medical problems.

Reporting Listeriosis in SC

Listeriosis is a reportable condition in SC. It appears under Report Within 7 Days on the South Carolina 2011 List of Reportable Conditions. It should be entered electronically in CHESS (Carolinas Health Electronic Surveillance System) or mailed on a DHEC 1129 card to your DHEC Regional Health Office www.scdhec.gov/administration/library/CR-009025.pdf

Labs are also requested to submit an isolate or broth to the DHEC Bureau of Laboratories for confirmatory testing or genotyping.

References

DHEC:

- www.scdhec.gov/health/disease/listeriosis.htm

CDC:

- www.cdc.gov/listeria/index.htmlFDA

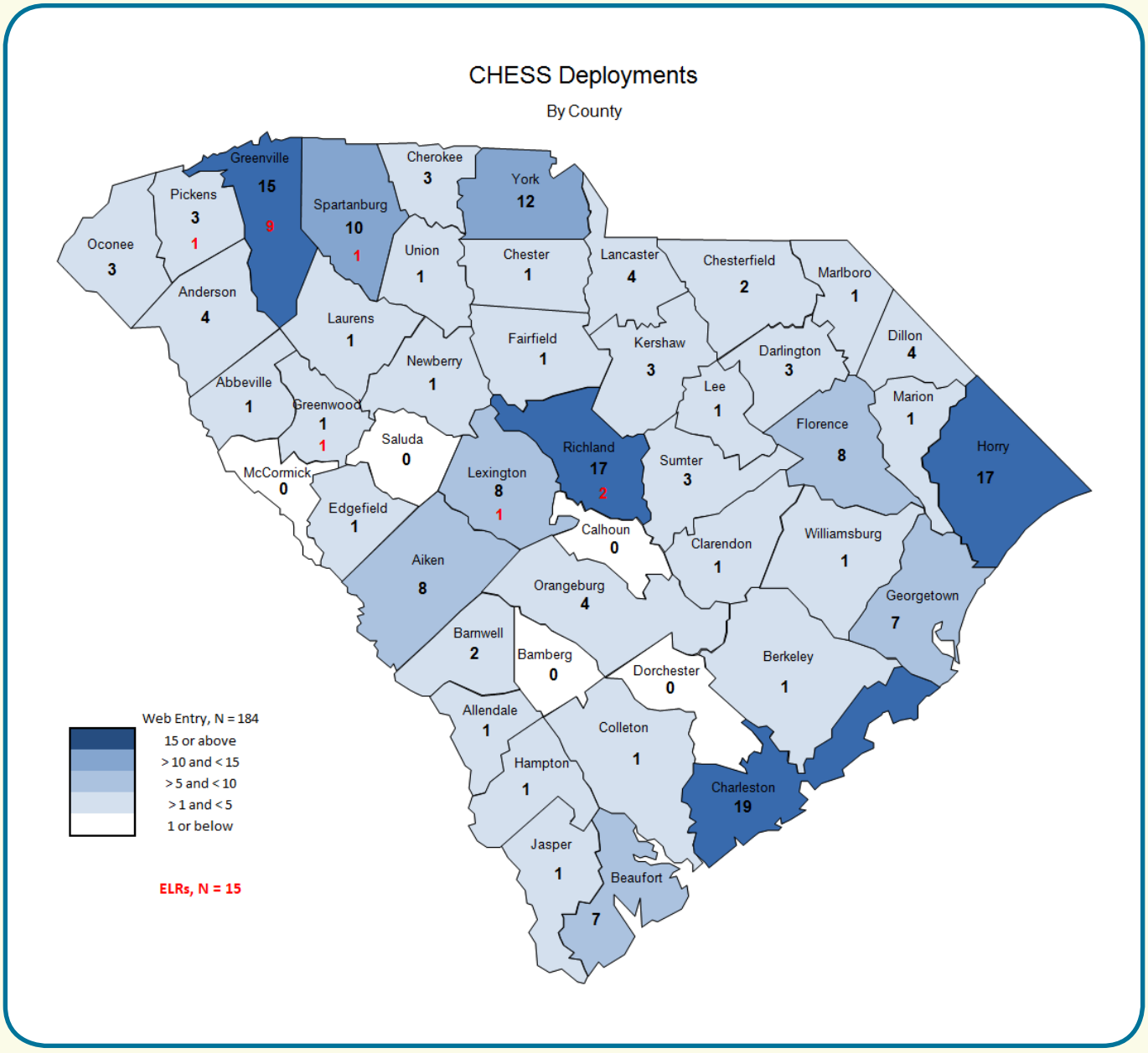
FDA:

- www.fda.gov/ForConsumers/ConsumerUpdates/ucm274114.htm
- www.fda.gov/AboutFDA/ContactFDA/StayInformed/RSSFeeds/FoodSafety/rss.xml

Important Information about CHESS

To schedule a deployment or find out more information about electronic reporting of SC 2011 Reportable Diseases/Conditions, please contact Ann W. Bell at 1-800-917-2093 or *bellaw@dhec.sc.gov*. Also contact Ann if you or your office needs retraining.

Anytime you have problems with accessing CHESS, please call the Help Desk 1-800-917-2093. Someone is there to help you Monday – Friday 9:00am – 4:30pm, except State holidays.



By The Numbers

2011 Disease/Condition *(as of October 12, 2011)*

Disease/Condition as of October 12, 2011	Case Status		Total
	Confirmed	Probable	
Aseptic meningitis	150	1	151
Campylobacteriosis	319	14	333
Creutzfeldt-Jakob Disease	0	1	1
Cryptosporidiosis	59	50	109
Dengue Fever	1	2	3
Ehrlichiosis, chaffeensis	1	1	2
Encephalitis, LaCrosse	0	1	1
Giardiasis	87	3	90
Group A Streptococcus, invasive	91	0	91
Group B Streptococcus, invasive	40	0	40
Haemophilus influenzae, invasive	63	0	63
Hemolytic uremic synd,postdiarrheal	1	0	1
Hepatitis A, acute	10	0	10
Hepatitis B virus infection, Chronic	81	321	402
Hepatitis B, acute	28	2	30
Hepatitis C Virus Infection, past or present	2,728	13	2,741
Hepatitis C, acute	1	0	1
Hepatitis Delta co- or super-infection, acute	1	0	1
Hepatitis E, acute	1	0	1
Influenza, Rapid Test	44,161	0	44,161
Influenza, human isolates	496	0	496
Legionellosis	18	0	18
Listeriosis	7	0	7

list continued on next page

By The Numbers

2011 Disease/Condition *(as of October 12, 2011)*

Lyme disease	17	9	26
Malaria	4	0	4
Neisseria meningitidis, invasive (Mening. disease)	9	0	9
Novel Influenza A Virus Infections	7	0	7
Pertussis	69	51	120
Q fever, Acute	1	0	1
Q fever, Chronic	0	1	1
Rubella	1	0	1
S. aureus, vancomycin intermediate susc (VISA)	2	0	2
Salmonellosis	1,233	5	1,238
Scombroid fish poisoning	0	1	1
Shiga toxin-producing Escherichia coli (STEC)	16	0	16
Shigellosis	42	0	42
Spotted Fever Rickettsiosis	11	21	32
Strep pneumoniae, invasive	354	0	354
Streptococcal toxic-shock syndrome	2	0	2
Tetanus	0	1	1
Toxic-shock syndrome,staphylococcal	0	3	3
Tuberculosis	78	0	78
Typhoid fever (Salmonella typhi)	1	0	1
Varicella (Chickenpox)	12	0	12
Vibrio parahaemolyticus	5	0	5
Vibrio spp., non-toxigenic, other or unspecified	2	0	2
Vibrio vulnificus infection	2	0	2
West Nile Fever	0	1	1
Yersiniosis	3	0	3
Total	50,274	502	50,776